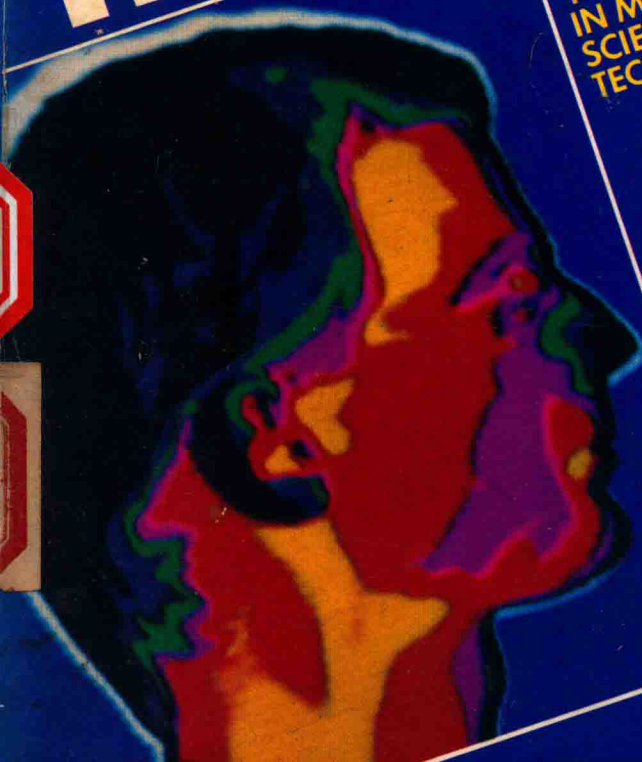




# BREAK-THROUGHS

CHARLES  
PANATI

ASTONISHING  
ADVANCES  
COMING IN  
YOUR LIFETIME,  
IN MEDICINE,  
SCIENCE AND  
TECHNOLOGY.



**Charles Panati**

# **BREAKTHROUGHS**

**Astonishing advances in your lifetime  
in medicine, science and technology**

**illustrations by Stan Fedinick**

**Pan Books**

**in association with Macmillan London**

for my aunts

Fay, Kay, Anne and Thelma  
and uncles

Carl, Ange and Bob

Special thanks to Michael Hudson for his helpful suggestions and editing, to Stan Fedinick for the style and imagination he brought to the drawings, and to my mother for her conscientious typing of the manuscript

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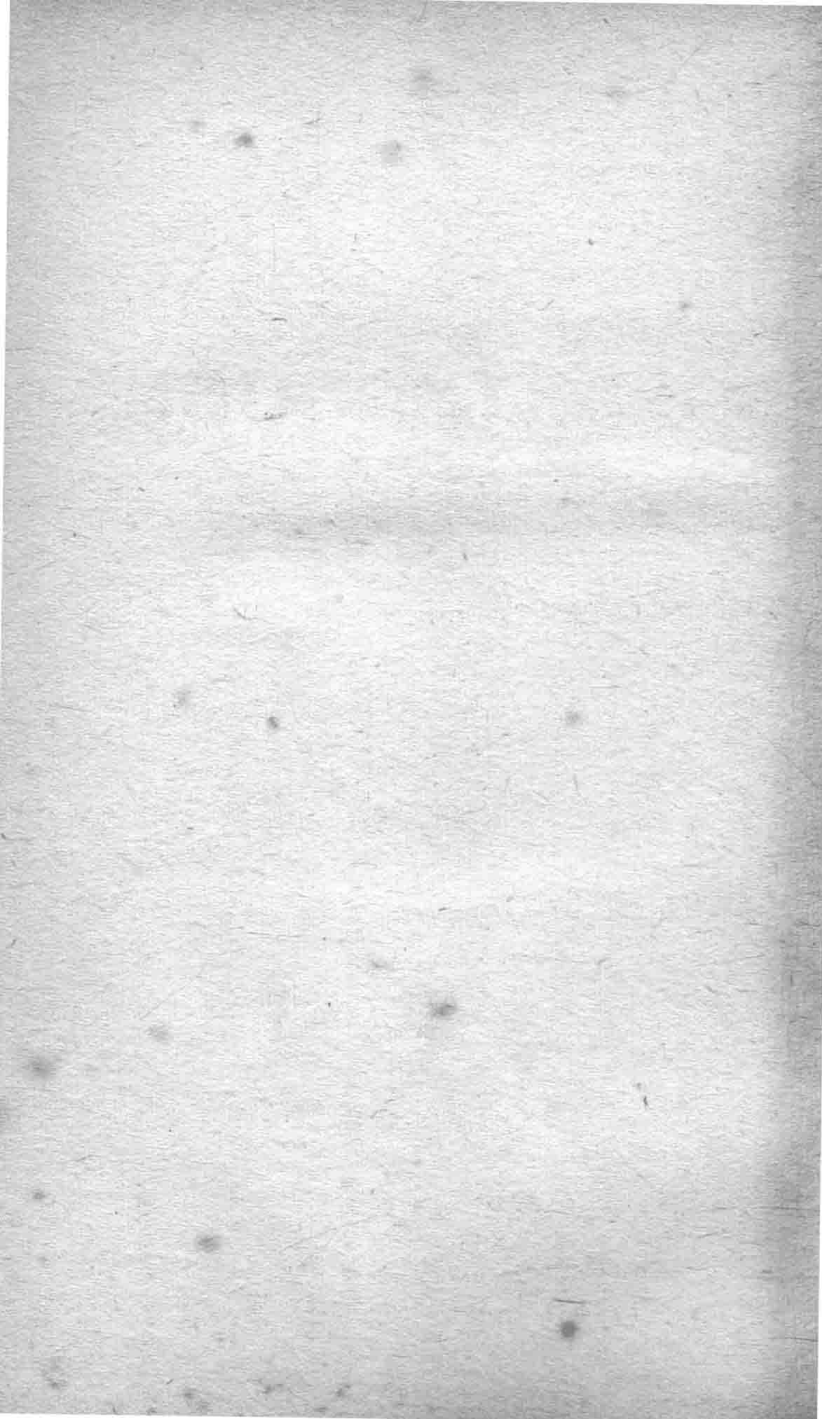
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## BREAKTHROUGHS

Charles Panati, a physicist, has taught at Columbia University, been head physicist at RCA in space communications and for six years was a science editor for *Newsweek* magazine. His previous books include *Supersenses*, *The Geller Papers* and a novel, *Links*. His articles on science and medicine have appeared in more than a dozen magazines, including *Reader's Digest*, *New York*, *Family Circle*, *Woman's Day* and *Redbook*. He is currently completing a book on the effects of radiation on life. His novel *Links* has been purchased by Hollywood producer Herb Jaffe and will soon be a United Artists' motion picture. Mr Panati was raised in Atlantic City, New Jersey, and for the last fifteen years has lived in New York City.





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